

2.25 INTERCONNECTION.

"Interconnection" refers, in this Agreement, to the connection of facilities and equipment between networks, either directly or indirectly, for the transmission and routing of Telephone Exchange Service and Exchange Access traffic. This term does not include the transport and termination of traffic.

2.26 INTEREXCHANGE CARRIER (IXC).

A Telecommunications Carrier that provides, directly or indirectly, InterLATA or IntraLATA telephone toll services.

2.27 INTERLATA TRAFFIC.

Telecommunications Traffic that originates in one LATA (as defined in the Act) and terminates in another LATA.

2.28 INTRALATA TOLL TRAFFIC.

Telecommunications Traffic that originates and terminates in the same LATA, excluding Local/EAS Traffic and ISP-Bound Traffic.

2.29 INTRALATA TRAFFIC.

Telecommunications traffic means traffic that originates and terminates outside the local calling area as (defined by the applicable local exchange Tariff) but within a LATA.

2.30 INTERNET PROTOCOL CONNECTION (IPC).

The physical location where End-User Customer information is originated or terminated utilizing internet protocol.

2.31 ISDN USER PART (ISUP).

A part of the SS7 protocol that defines call setup messages and call takedown messages.

2.32 ISP-BOUND TRAFFIC.

Traffic that originates from or is directed, either directly or indirectly, to or through an information service provider or Internet service provider ("ISP") who is physically located in an area within the Local/EAS exchange of the originating End-User Customer. Traffic originated from, directed to or through an ISP physically located outside the originating End-User Customer's Local/EAS exchange will be considered Toll Traffic and subject to access charges.

2.33 JURISDICTIONAL INDICATOR PARAMETER (JIP).

A six-digit number which provides a unique identifier representing the originating carrier. JIP is defined in the Alliance for Telecommunications Industry Solutions. Reference Document ATIS-030001 1.

2.34 LINE INFORMATION DATABASE (LIDB).

One or all, as the context may require, of the Line Information Databases owned individually by ILEC and other entities which provide, among other things, calling card validation functionality for telephone line number cards issued by ILEC and other entities. A LIDB also contains validation data for collect and third number-billed calls; i.e., Billed Number Screening.

2.35 LOCAL ACCESS AND TRANSPORT AREA (LATA).

Shall have the meaning set forth in the Act.

2.36 LOCAL/EAS TRAFFIC.

Means traffic (specifically including Interconnected VoIP Service Traffic and excluding Commercial Mobile Radio Services traffic (e.g., paging, cellular, PCS)) that is originated and terminated between one Party's End-User Customer and the other Party's End-User Customer, both of whom are located within the same local calling area (as defined by ILEC's local exchange Tariff) or ILEC's mandatory extended area service ("EAS") area, as defined by the Commission or, if not defined by the Commission, then as defined in ILEC's existing general subscriber Tariff. Local Traffic does not include: (1) optional local calling scopes—i.e., optional rate packages that permit the End-User Customer to choose a local calling scope beyond their basic exchange serving area for an additional fee (also referred to as "optional EAS"); (2) ISP-Bound Traffic; provided, however, any Interconnected VoIP Service Traffic shall not be considered ISP-Bound Traffic; (3) "Toll Traffic," which includes calls originated on a 1+ presubscription basis or on a casual dialed (10XXX/101XXXX) basis; (4) special access, private line, Frame Relay, ATM, or any other traffic that is not switched by the terminating Party; or (5) Transit Traffic.

2.37 LOCAL EXCHANGE CARRIER (LEC).

Shall have the meaning set forth in the Act.

2.38 LOCAL EXCHANGE ROUTING GUIDE (LERG).

The Telcordia Technologies reference customarily used to identify NPA/NXX routing and homing information, as well as network element and equipment designation.

2.39 NORTH AMERICAN NUMBERING PLAN (NANP).

The system of telephone numbering employed in the United States, Canada, Bermuda, Puerto Rico and certain Caribbean islands. The NANP format is a 10-digit number that consists of a 3-digit NPA Code (commonly referred to as area code), followed by a 3-digit Central Office code and a 4-digit line number.

2.40 NUMBERING PLAN AREA (NPA).

Also sometimes referred to as an area code, is the first three-digit indicator of each 10-digit telephone number within the NANP. Each NPA contains 800 possible NXX Codes. There are two general categories of NPA, "Geographic NPAs" and "Non-Geographic NPAs". A Geographic NPA is associated with a defined geographic area, and all telephone numbers bearing such NPA are associated with services provided within that geographic area. A Non-Geographic NPA, also known as a "Service Access Code" or "SAC Code" is typically associated with a specialized Telecommunications Service that may be provided across multiple geographic NPA areas. 500, 700, 800, 888 and 900 are examples of Non-Geographic NPAs.

2.41 NXX, NXX CODE, CENTRAL OFFICE CODE OR CO CODE.

The three-digit switch entity indicator (i.e. the first three digits of a seven-digit telephone number). Each NXX Code contains 10,000 station numbers.

2.42 POINT OF INTERCONNECTION (POI).

"Point of Interconnection" or "POI" means the physical location(s) within the geographic network boundary mutually agreed upon and designated by the Parties for the purpose of exchanging traffic. Each Party shall be responsible for all facilities and costs on its respective side of the POI.

2.43 RATE CENTER AREA.

A Rate Center Area is a geographic location, which has been defined by the Commission as being associated with a particular NPA/NXX code, which has been assigned to an ILEC for its provision of Telephone Exchange Service. Rate Center Area is normally the same as the boundary of the ILEC Exchange Area as defined by the Commission.

2.44 RATE CENTER.

The finite geographic point identified by a specific V&H coordinate which is used by the ILEC to measure, for billing purposes, distance-sensitive transmission services associated with the specific Rate Center; provided that a Rate Center cannot exceed the boundaries of the ILEC Exchange Area as defined by the Commission.

2.45 SIGNALING SYSTEM 7 (SS7).

The common channel out-of-band signaling protocol developed by the Consultative Committee for International Telephone and Telegraph (CCITT) and the American National Standards Institute (ANSI). ILEC and CLEC currently utilize this out-of-band signaling protocol.

2.46 SUBSCRIPTION VERSION.

A time-sensitive or status-sensitive instance of a telephone number record that describes the data necessary to port the telephone number from one service provider to another. The data that a Subscription Version contains includes information such as the Old Service Provider and New Service Provider, routing, and due dates. This data is entered into the NPAC SMS database.

2.47 SWITCHED ACCESS SERVICE.

The offering of transmission and switching services for the purpose of the origination or termination of Toll Traffic. Switched Access Services include, but may not be limited to, Feature Group A, Feature Group B, Feature Group D, 700 access, 8XX access, and 900 access.

2.48 TANDEM OR TANDEM SWITCH OR TANDEM OFFICE SWITCH.

Tandem means to connect in series. A Tandem, Tandem Switch or Tandem Office Switch connects one trunk to another for the purpose of exchanging Local Traffic. It is an intermediate (Class 4) switch between an originating telephone call and the final destination of the call.

2.49 TELECOMMUNICATIONS CARRIER.

Telecommunications Carrier shall have the meaning set forth in § 153(44) of the Act. This definition includes CMRS providers, IXCs and, to the extent they are acting as Telecommunications Carriers, companies that provide both Telecommunications and Information Services. Private mobile radio service providers are Telecommunications Carriers to the extent they provide domestic or international telecommunications for a fee directly to the public.

2.50 TARIFF.

Any applicable Federal or State Tariff of a Party, as amended from time to time.

2.51 TELCORDIA TECHNOLOGIES.

Formerly known as Bell Communications Research. The organization conducts research and development projects for its owners, including development of new Telecommunications Services. Telcordia Technologies also provides generic requirements for the telecommunications industry for products, services and technologies.

2.52 TELECOMMUNICATIONS SERVICE.

Has the meaning set forth in 47 U.S.C. § 153(53).

2.53 TELECOMMUNICATIONS TRAFFIC.

Has the meaning set forth in 47 U.S.C. § 251(b)(5).

2.54 TELEPHONE EXCHANGE SERVICE.

Has the meaning set forth in 47 U.S.C. § 153 (54).

2.55 TOLL TRAFFIC.

Toll Traffic means all calls that are not Local/EAS Traffic or ISP-Bound Traffic.

2.56 TRANSIT TRAFFIC.

Traffic between the Parties' End-User Customers that is routed utilizing a third-party Telecommunications Carrier's local and/or Access Tandem Switch, or between a Party's End-User Customers and a third-party Telecommunications Carrier's customers (*e.g.*, third-party CLECs, ILECs) that is routed utilizing the other Party's local and/or Access Tandem Switch. Transit Traffic does not include any traffic delivered to or from, or carried by an Interexchange Carrier (IXC) at any time during the call.

INTERCONNECTION ATTACHMENT
to
INTERCONNECTION AGREEMENT

1. Services Covered by This Attachment.

- 1.1 To the extent required by Applicable Law and subject to the terms and conditions of this Agreement, the Parties will maintain the current Interconnection of their networks for the transmission and routing of Telecommunications Services and for all other purposes permitted under Applicable Law.
- 1.2 This Attachment governs the provision of inter-network facilities (i.e., physical connection services and facilities), by either Party to the other Party and the transport and termination and billing of Local Traffic between the Parties.

2. Network Interconnection Methods.

2.1 Introduction

- 2.1.1 This Section 2 of this Attachment sets forth the terms and conditions by which Network Interconnection Methods are provided between the Parties. Network Interconnection Methods designate facilities established between the Parties' networks. Additionally, this Section 2 describes the physical architecture for Interconnection of the Parties' facilities and equipment for the transmission and routing of Local Traffic and Exchange Access traffic between the respective End-User Customers of the Parties; provided, however, Interconnection may not be used solely for the purpose of originating a Party's own interexchange traffic.
- 2.1.2 Network Interconnection Methods (NIMs) include, but are not limited to, Leased Facilities Interconnection and other methods as mutually agreed to by the Parties. To the extent that either Party chooses to modify current arrangements, it will do so pursuant to the terms of this Attachment.
 - 2.1.2.1 Trunking requirements associated with Interconnection are contained in Section 3 of this Attachment.
- 2.1.3 ILEC shall provide Interconnection for CLEC's facilities and equipment for the transmission and routing of Telecommunications Traffic and Interconnected VoIP Service Traffic at a level of quality equal to that which ILEC provides itself, a Subsidiary, an Affiliate, and any other party to which ILEC provides Interconnection and on rates, terms and conditions that are just, reasonable and non-discriminatory. ILEC will not impose any restrictions on CLEC that are not imposed on its own traffic with respect to trunking and routing options afforded to CLEC.

2.2 Physical Architecture

- 2.2.1 ILEC's network includes, but is not limited to, End Office switches that serve IntraLATA, InterLATA, Local, and EAS traffic. ILEC's network architecture in any given local exchange area and/or LATA can vary markedly from another local exchange area/LATA. CLEC will interconnect with ILEC on ILEC's existing Interconnection facilities between each Party's switches and ILEC's End Offices or Tandems.
- 2.2.2 A Point of Interconnection (POI) is a point within ILEC's network where the Parties deliver Local Traffic to each other, and also serves as a demarcation point between the facilities that each Party is responsible to provide. CLEC must establish a minimum of one (1) POI within each LATA, at any technically feasible point on ILEC's network. In addition, CLEC shall establish additional POIs under the following circumstances:
- 2.2.2.1 To the extent ILEC's network contains multiple Tandem Switches in the LATA, CLEC must establish a POI at each Tandem Switch where it wishes to exchange (*i.e.*, receive or terminate) Local Traffic with ILEC.
- 2.2.2.2 When an ILEC End Office Switch subtends an ILEC Tandem Switch, CLEC must establish a POI at an ILEC End Office when total traffic volumes exchanged between the Parties at that particular ILEC End Office meet or exceed 240,000 minutes (DS1) per month for three (3) consecutive months.
- 2.2.2.3 When an ILEC End Office Switch subtends a non-ILEC Tandem, CLEC must establish a POI at any ILEC End Office Switch that subtends a non-ILEC Tandem at such time as the total traffic volumes exchanged between the Parties at the particular ILEC End Office where CLEC desires to terminate Local Traffic meet or exceed 240,000 minutes (DS1) per month for three (3) consecutive months.
- 2.2.3 Each Party is financially and otherwise responsible for its own equipment, facilities, and trunks on its side of the POI and may utilize any method of Interconnection described in this Section 2. Each Party is responsible for the appropriate sizing, operation, maintenance and cost of the transport facility to the POI.
- 2.2.4 Network Changes. ILEC shall provide notice of network changes and upgrades in accordance with §§ 51.325 through 51.335 of Title 47 of the Code of Federal Regulations (47 CFR). ILEC may discontinue any Interconnection, Telecommunications Service, or Network Element provided or required hereunder due to network changes or upgrades after providing CLEC notice as required by this Section. ILEC agrees to

cooperate with CLEC and/or the appropriate regulatory body in any transition resulting from such discontinuation of service and to minimize the impact to End-User Customers, which may result from such discontinuance of service

- 2.2.5 Each Party is solely responsible for the facilities that carry OS/DA, 911 or mass calling for their respective End-User Customers.

2.3 Technical Interfaces

- 2.3.1 Electrical handoffs at the POI will be DS1 or DS3 as mutually agreed to by the Parties. When a DS3 handoff is agreed to by the Parties, each Party will provide all required multiplexing at its respective end.
- 2.3.2 Where available and upon the request of the other Party, each Party shall cooperate to ensure that its trunk groups are configured utilizing the B8ZS Extended Superframe protocol for 64 kbps Clear Channel Capability (64CCC) transmission to allow for ISDN interoperability between the Parties' respective networks. Trunk groups configured for 64CCC and carrying Circuit Switched Data (CSD) ISDN calls shall carry the appropriate Trunk Type Modifier in the CLCI-Message code. Trunk groups configured for 64CCC and not used to carry CSD ISDN calls shall carry a different appropriate Trunk Type Modifier in the CLCI-Message code.

2.4 Methods of Interconnection

2.4.1 Leased Facility Interconnection ("*LFI*")

- 2.4.1.1 Where facilities exist, CLEC may lease facilities from ILEC pursuant to ILEC's applicable Tariff. CLEC also may lease facilities from a third party or it may construct or otherwise self-provision facilities.

2.5 Responsibilities of the Parties

- 2.5.1 CLEC and ILEC shall work cooperatively to install and maintain a reliable network. CLEC and ILEC shall exchange appropriate information (e.g., maintenance contact numbers, network information, information required to comply with law enforcement and other security agencies of the federal and state government and such other information as the Parties shall mutually agree) to achieve this desired reliability.
- 2.5.2 CLEC and ILEC will review engineering requirements as required and establish semi-annual forecasts for facilities utilization provided under this Attachment.
- 2.5.3 CLEC and ILEC shall:

2.5.3.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.

2.5.3.2 Notify each other when there is any change affecting the service requested, including the due date.

2.5.3.3 Recognize that a facility handoff point must be agreed to that establishes the demarcation for maintenance and provisioning responsibilities for each Party on its side of the POI.

2.6 Joint Facility Growth Planning

2.6.1 The initial facilities deployed for each Interconnection shall be agreed to by the Parties. The following lists the criteria and processes needed to satisfy additional capacity requirements beyond the initial system.

2.6.2 Criteria.

2.6.2.1 Investment is to be minimized.

2.6.2.2 Facilities will be planned for in accordance with the trunk forecasts exchanged between the Parties as described in Sections 2.6.1 and 3.5 of this Attachment and are to be deployed in accordance with the Processes described below.

2.6.3 Processes.

2.6.3.1 In addition to the joint trunk group forecasting established in Section 3.5 of this Attachment, discussions to provide relief to existing facilities can be initiated by either Party. Actual system augmentations will be initiated upon mutual agreement.

2.6.3.2 Both Parties will perform a joint validation to ensure current Interconnection facilities and associated trunks have not been over-provisioned. If any facilities and/or associated trunks are over-provisioned, they will be turned down where appropriate. Trunk design blocking criteria described in Section 3.6 of this Attachment will be used in determining trunk group sizing requirements and forecasts.

2.6.3.3 If, based on the forecasted equivalent DS-1 growth, the existing facilities are not projected to exhaust within one (1) year, the Parties will suspend further relief planning on this Interconnection until a date one (1) year prior to the projected exhaust date. If growth patterns change during the suspension period, either Party may re-initiate the joint planning process.

2.6.3.4 Both Parties will negotiate a project service date and corresponding work schedule to construct relief facilities prior to facilities exhaust.

2.6.3.5 The joint planning process/negotiations should be completed within two (2) months of the initiation of such discussion.

3. Interconnection Trunking Requirements.

3.1 Introduction

3.1.1 This Section 3 of the Interconnection Attachment sets forth terms and conditions for Interconnection provided by ILEC and CLEC.

3.1.2 This Section 3 of the Interconnection Attachment provides descriptions of the trunking requirements between CLEC and ILEC. All references to incoming and outgoing trunk groups are from the perspective of CLEC. The Sections below describe the required and optional trunk groups for local and mass calling.

3.1.3 Local trunk groups may only be used to transport traffic between the Parties' End-User Customers pursuant to the terms of this Attachment.

3.2 One-Way and Two-Way Trunk Groups

3.2.1 One-way trunk groups for ancillary services (e.g. mass calling) can be established between the Parties. Ancillary trunk groups will utilize Signaling System 7 (SS7) or multi-frequency (MF) signaling protocol, with SS7 signaling preferred whenever possible. The originating Party will have administrative control of one-way trunk groups.

3.2.2 The Parties agree that two-way trunk groups for Local, IntraLATA and InterLATA Traffic shall be established between a CLEC switch and an ILEC End Office switch pursuant to the terms of this Attachment. Trunks will utilize Signaling System 7 (SS7) or multi-frequency (MF) signaling protocol, with SS7 signaling being used whenever possible. Two-way trunking for Local Traffic will be jointly provisioned and maintained, with each Party being financially and otherwise responsible for costs for equipment, facilities, and trunks on its side of the POI. For administrative consistency CLEC will have control for the purpose of issuing Access Service Requests (ASRs) on two-way groups. Either Party will also use ASRs to request changes in trunking. Both Parties reserve the right to issue ASRs, if so required, in the normal course of business.

3.2.3 Notwithstanding the preceding Section 3.2.2 above, the Parties recognize that certain technical and billing issues may necessitate the use of one-way trunking for an interim period. Either Party may provision its own one-way trunks. Regardless of whether one-way or two-way facilities are

provisioned, each Party is individually responsible to provide facilities to the POI. The Parties will negotiate the appropriate trunk configuration, whether one-way or two-way giving consideration to relevant factors, including but not limited to, existing network configuration, administrative ease, any billing system and/or technical limitations and network efficiency. Any disagreement regarding appropriate trunk configuration shall be subject to the dispute resolution process in Section 10 of this Agreement.

3.2.4 Separate local trunk groups may be established based on billing, signaling, and network requirements. The following is the current list of traffic types that require separate trunk groups, unless specifically stated otherwise in this Agreement:

3.2.4.1 911/E911 trunks;

3.2.4.2 Mass Calling Trunks, if applicable; and

3.2.4.3 Toll Free Service trunks where CLEC provides such service to its End-User Customers.

3.2.4.4 Transit trunk groups to allow for termination of traffic by third parties.

3.3 Network Connection and POI

3.3.1 Indirect Network Connection. CLEC may establish and utilize an indirect network connection with ILEC, until such time as the Threshold Trigger set forth in Section 3.3.3 is met, or the Parties otherwise agree that a direct connection is necessary. The following terms shall apply to any indirect network connection arrangement between the Parties.

3.3.2 When an indirect network connection is utilized, ILEC and CLEC shall each be responsible for delivering Local Traffic to, and receiving Local Traffic at, the Tandem Switch serving the ILEC End Office where CLEC desires to terminate such Local Traffic. Until the Threshold Trigger set forth in Section 3.3.3 is reached, each Party is responsible for the costs associated with delivering its originated traffic to such Tandem Switch.

3.3.3 Threshold Trigger. CLEC may use or establish an indirect network connection to terminate Local Traffic to an ILEC local exchange until such time as the total volume of Local Traffic and ISP-Bound Traffic being exchanged between CLEC and the ILEC local network equals or exceeds 240,000 minutes (DS1) per month for three (3) consecutive months ("**Threshold Trigger**"). Until such time as the Threshold Trigger is reached, Section 3.3.1 above shall govern the Parties' respective responsibilities (including responsibilities for the costs of facilities) relating to the indirect network connection. If the Threshold Trigger is

reached, CLEC shall interconnect directly with ILEC, via a physical POI located within the ILEC network, as set forth in Section 2.2.2, and shall do so within a commercially reasonable period of time consistent with industry standards. Upon the establishment of such Interconnection, the Parties will become responsible for the facilities on their respective sides of the newly established POI. ILEC will not be responsible for the costs associated with facilities located outside of the ILEC local exchange or the transport and third-party transit cost of any Local Traffic outside of the ILEC local exchange once the direct interconnection has been established. Each Party will be responsible for its own originated overflow traffic that utilizes a third-party tandem as its alternate route to the extent transmission of such overflow traffic is permitted by Section 3.3.6.

- 3.3.4 During the time that any indirect network connection arrangement is operational, the Parties agree to enter into their own agreements with third-party providers, as may be necessary.
- 3.3.5 To the extent a Party combines Local Traffic and jointly provided Switched Access Service traffic on a single trunk group for indirect delivery through a Tandem, the originating Party, at the terminating Party's request, will declare quarterly Percentages of Local Use (PLUs). Such PLUs will be verifiable with either call summary records utilizing Calling Party Number (CPN) information for jurisdictionalization of traffic or call detail samples. Call detail or direct jurisdictionalization using CPN information may be exchanged in lieu of PLU, if it is available. The terminating Party should apportion per minute of use (MOU) charges appropriately.
- 3.3.6 After a Party has established Direct Interconnection between the Parties' networks, neither Party may continue to transmit its originated Local Traffic and ISP-Bound Traffic indirectly except on an overflow basis to mitigate traffic blockage, equipment failure or emergency situations.
- 3.3.7 As between the Parties, Local Traffic and ISP-Bound Traffic exchanged by the Parties indirectly through a third-party transiting carrier shall be subject to the same compensation arrangements, if any, as Local Traffic and ISP-Bound Traffic exchanged through Direct Interconnection.
- 3.3.8 Direct Network Connection.
 - 3.3.8.1 When the Threshold Trigger set forth in Section 3.3.3 is met, or upon mutual agreement, the Parties shall establish a physical connection between their respective networks ("**Direct Network Connection**"). The Direct Network Connection shall also serve as the POI.

3.3.8.2 A Direct Network Connection shall be established by connecting CLEC's network to ILEC's network at a technically feasible point on ILEC's network pursuant to Section 2.2.2 and its subsections. The connection may be established using any of the design options set forth in Section 2.4 (Methods of Interconnection) of this Attachment, or as otherwise mutually agreed to by the Parties.

3.3.8.3 [Intentionally left blank]

3.3.8.4 Regardless of the design option used to establish a Direct Network Connection between CLEC's network and ILEC's network, and unless otherwise mutually agreed to by the Parties, CLEC must establish a POI on ILEC's network pursuant to Section 2.2.2 and its subsections when the Threshold Trigger set forth in Section 3.3.3 is reached. Each Party shall be responsible for establishing and maintaining all facilities on its side of the POI. Each Party shall be responsible for the appropriate sizing, operation, and maintenance of the transport facility from its network to the POI. Except as set forth in Section 3.3.1 of this Attachment, under no circumstances shall ILEC be responsible for establishing or maintaining any facilities outside of the ILEC network for the exchange of Local Traffic between the Parties or for the costs associated with transporting any such traffic outside of the ILEC local exchange.

3.3.8.5 To the extent a dispute arises between the Parties regarding their respective obligations under Sections 2 or 3 of this Attachment, the Parties intend that such dispute(s) will be resolved before the Commission, notwithstanding Section 10 of this Agreement, Dispute Resolution, providing that disputes may be resolved in forums other than the Commission. Such disputes may only be heard by other forums on appeal. With respect to a dispute(s) in the nature of those identified in this Section, a Party may seek resolution thereof before the Commission, on an expedited basis or otherwise, following satisfaction of the informal dispute resolution requirements of Section 10.2 of this Agreement.

3.3.8.6 All traffic received by ILEC on the direct End Office trunk group from CLEC must terminate in the End Office, i.e. no Tandem switching will be performed in the End Office. All traffic received by CLEC on the direct End Office trunk group from ILEC must terminate in the End Office, i.e., no Tandem switching will be performed in the End Office. Where End Office functionality is provided in a remote End Office of a host/remote configuration, the Interconnection for that remote End Office is only available at the host switch. The number of digits to be received by the

terminating Party shall conform to standard industry practices; but in no case shall the number of digits be less than seven (7).

3.3.8.7 CLEC and ILEC shall, where applicable, make reciprocally available, the required trunk groups to handle different traffic types. CLEC and ILEC will support the provisioning of trunk groups that carry combined or separate Local Traffic. Notwithstanding the above, ILEC requires separate trunk groups from CLEC to originate and terminate Toll Traffic calls and to provide Switched Access Service to IXCs.

3.3.8.7.1 Each Party agrees to route traffic only over the proper jurisdictional trunk group.

3.3.8.7.2 Each Party shall only deliver traffic over the local connection trunk groups to the other Party's access Tandem for those publicly-dialable NXX Codes served by End Offices that directly subtend the access Tandem or to those wireless service providers that directly subtend the access Tandem.

3.3.8.7.3 Neither Party shall route Switched Access Service traffic over Local Interconnection Trunks, or Local Traffic over Switched Access Service trunks.

3.4 Trunk Groups

3.4.1 The following trunk groups shall be used to exchange Local Traffic between CLEC and ILEC when using a Direct Network Connection.

3.4.2 Local Interconnection Trunk Group(s) in Each Exchange.

3.4.2.1 To the extent it has not already been established, the Parties shall establish and maintain a direct End Office primary high usage Local Interconnection Trunk Group for the exchange of Local Traffic between CLEC's network and ILEC's local exchange where the total volume of Local Traffic and ISP-Bound Traffic meets or exceeds the Threshold Trigger set forth in Section 3.3.3 of this Attachment.

3.4.3 [Intentionally omitted]

3.4.4 CLEC shall provide all SS7 signaling information including, without limitation, charge number and originating line information (OLI). For terminating FGD, ILEC will pass all SS7 signaling information including, without limitation, CPN if it receives CPN from FGD carriers. All privacy indicators will be honored. Where available, network signaling information such as transit network selection (TNS) parameter, carrier

identification codes (CIC) (CCS platform) and CIC/OZZ information (non-SS7 environment) will be provided by CLEC wherever such information is needed for call routing or billing. The Parties will follow all OBF adopted standards pertaining to TNS and CIC/OZZ codes.

3.4.5 High-Volume/Mass Calling Trunk Group.

3.4.5.1 If CLEC should acquire a high-volume/mass-calling customer, i.e. an ISP or a radio station, CLEC shall provide written notification to ILEC.

3.5 Forecasting and Planning Responsibilities

3.5.1 CLEC agrees to provide an initial forecast for establishing the initial Interconnection Facilities pursuant to Section 2.6.1 of this Attachment. ILEC shall review this forecast, and if it has any additional information that will change the forecast shall provide this information to CLEC. The Parties recognize that, to the extent historical traffic data can be shared between the Parties, the accuracy of the forecasts will improve. CLEC shall provide subsequent forecasts on a semi-annual basis. CLEC forecasts should include yearly forecasted trunk quantities for all appropriate trunk groups described in this Section for a minimum of three (3) years. Forecasts shall be non-binding on both ILEC and CLEC. ILEC shall take CLEC's forecasts into consideration in its network planning, and shall exercise its best efforts to provide the quantity of Interconnection trunks and facilities forecasted by CLEC. However, the development and submission of forecasts shall not replace the ordering process in place for Interconnection trunks and facilities, and the provision of the forecasted quantity of Interconnection trunks and facilities is subject both to capacity existing at the time the order is submitted as well as to the demonstrated need based on the fill rate of the existing trunks and facilities. Furthermore, the development and receipt of forecasts does not imply any liability for failure to perform if capacity is not available for use at the forecasted time.

3.5.2 The semi-annual forecasts shall include:

3.5.2.1 Yearly forecasted trunk quantities (which include measurements that reflect actual, End Office Local Interconnection trunks, and Tandem subtending Local Interconnection End Office equivalent trunk requirements) for a minimum of three (current and plus 1 and plus 2) years; and

3.5.2.2 A description of major network projects anticipated for the following six (6) months. Major network projects include trunking or network rearrangements, shifts in anticipated traffic patterns, orders greater than four (4) DS1's, or other activities that are

reflected by a significant increase or decrease in trunking demand for the following forecasting period.

- 3.5.3 The Parties shall agree on a forecast provided above to ensure efficient utilization of trunks. Orders for trunks that exceed forecasted quantities for forecasted locations will be accommodated as facilities and/or equipment becomes available. Parties shall make all reasonable efforts and cooperate in good faith to develop alternative solutions to accommodate orders when facilities are not available.
- 3.5.4 CLEC shall be responsible for forecasting and servicing two-way trunk groups. ILEC shall be responsible for forecasting and servicing the one-way trunk groups terminating to CLEC, and CLEC shall be responsible for forecasting and servicing the one-way trunk groups terminating to ILEC, unless otherwise specified in this Section. Standard trunk traffic engineering methods will be used by the Parties
- 3.5.5 If forecast quantities are in dispute, the Parties shall meet, either in person or via conference call, to reconcile the differences.
- 3.5.6 Each Party shall provide a specified point of contact for planning, forecasting and trunk servicing purposes.
- 3.5.7 ILEC shall attempt to meet CLEC's requests for Interconnection using currently available facilities and capacity. ILEC shall have no obligation to construct additional facilities or capacity to meet CLEC's requests for Interconnection. However, if ILEC refuses a CLEC request for Interconnection due to lack of facilities or lack of capacity on the trunk side of an Interconnection, ILEC will provide an explanation of the reason(s) lack of facilities or lack of capacity exists. CLEC may request to work with ILEC to establish a construction plan, and ILEC shall promptly provide a construction plan setting forth the timeline for adding the additional capacity. CLEC shall bear all costs associated with engineering and constructing such additional facilities or capacity.
- 3.5.8 Notwithstanding the above, if CLEC determines to offer local exchange service within an ILEC area, EAS to an ILEC area or otherwise assign numbers rated to the ILEC exchange, CLEC may, at its sole discretion, provide thirty (30) days written notice to ILEC of the need to establish Interconnection. Such request shall include (i) CLEC's switch address, type, and CLLI; (ii) CLEC's requested Interconnection activation date; and (iii) a non-binding forecast of CLEC's trunking and facilities requirements.
 - 3.5.8.1 Upon receipt of CLEC's notice to interconnect, the Parties shall schedule a meeting to negotiate and mutually agree on the network architecture (including trunking) to be documented as discussed

above. The Interconnection activation date for an Interconnection shall be established based on then-existing work force and load, the scope and complexity of the requested Interconnection and other relevant factors.

3.5.8.2 If, after the Effective Date, CLEC deploys additional switches that will serve its End-User Customers located in the ILEC service area, and which may necessitate the need to establish additional POIs with ILEC's network, then CLEC shall provide written notice to ILEC to establish such Interconnection. The terms and conditions of this Agreement shall apply to such Interconnection. If ILEC deploys additional End Office switches in a local exchange after the Effective Date or otherwise wishes to establish Interconnection with additional CLEC Central Offices in such local exchange, ILEC shall be entitled, upon written notice to CLEC, to establish such Interconnection and the terms and conditions of this Agreement shall apply to such Interconnection.

3.6 Trunk Design Blocking Criteria

3.6.1 In accordance with industry traffic engineering standards, trunk requirements for forecasting and servicing shall be based on the blocking objectives shown in Table 1. Trunk requirements shall be based upon time consistent average busy season busy hour twenty-one (21) day averaged loads applied to industry standard Neal-Wilkinson Trunk Group Capacity algorithms (use medium day-to-day variation and 1.0 peakedness factor until actual traffic data is available) or equivalent Erlang B or Poisson factors.

TABLE 1

<u>Trunk Group Type</u>	<u>Design Blocking Objective</u>
Local Direct End Office (Primary High)	as mutually agreed upon
Local Direct End Office (Final)	1%

3.7 Trunk Servicing

3.7.1 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by using an Access Service Request (ASR). CLEC will have administrative control for the purpose of issuing ASR's on two-way trunk groups. Where one-way trunks are used (as discussed in Section 3.5.4 of this Attachment), ILEC will issue ASRs for trunk groups for traffic that originates from ILEC and terminates to CLEC. The Parties agree that neither Party shall alter trunk sizing without first conferring with the other Party.

3.7.2 Both Parties will jointly manage the capacity of Local Interconnection Trunk Groups. Either Party may send an ASR to the other Party to trigger changes to the Local Interconnection Trunk Groups based on capacity assessment.

3.7.3 Underutilization.

3.7.3.1 Underutilization of Interconnection trunks and facilities exists when provisioned capacity is greater than the current need. This over provisioning is an inefficient deployment and use of network resources and results in unnecessary costs. Those situations where more capacity exists than actual usage requires will be handled in the following manner:

3.7.3.1.1 If a trunk group is under 65 percent (65%) of CCS capacity on a monthly average basis, for each month of any three (3) consecutive months period, either Party may request the issuance of an order to resize the trunk group, which shall be left with not less than 20 percent (20%) excess capacity. In all cases grade of service objectives shall be maintained.

3.7.3.1.2 Either Party may send an ASR to the other Party to trigger changes to the Local Interconnection Trunk Groups based on capacity assessment. Upon receipt of an ASR the receiving Party will issue an ASR to the other Party within twenty (20) business days after receipt of the initiating ASR.

3.7.3.1.3 Upon review of the ASR if a Party does not agree with the resizing, the Parties will schedule a joint planning discussion within twenty (20) business days. The Parties will meet to resolve and mutually agree to the disposition of the initiating ASR.

3.8 CLEC will be responsible for engineering its network on its side of the POI. ILEC will be responsible for engineering its network on its side of the POI.

3.9 Where facilities are available, due dates for the installation of Local Interconnection Trunks covered by this Section shall be provided by ILEC to CLEC. If either CLEC or ILEC is unable to or not ready to perform acceptance tests, or is unable to accept the Local Interconnection Service Arrangement trunk(s) by the due date, the Parties will reschedule a mutually acceptable date.

3.10 Utilization shall be defined as Trunks required as a percentage of Trunks In Service. Trunks required shall be determined using methods described in Section 3.5 of this Attachment using Design Blocking Objectives stated in Section 3.6 of this Attachment.

3.10.1 Should CLEC request trunking from ILEC in excess of the industry traffic engineering design blocking standard, referenced above, ILEC may request that the Parties meet to discuss the request and CLEC's reasons for the request. ILEC is not obligated to provide such trunking unless CLEC agrees in writing to pay for the excess trunking on the ILEC side of the POI. CLEC agrees in writing to pay for the excess trunking on the ILEC side of the POI so long as the trunking is in excess of the design blocking standard.

3.11 Trunk Data Exchange

3.11.1 Each Party agrees to service trunk groups to the foregoing blocking criteria in a timely manner when trunk groups exceed measured blocking thresholds on an average time consistent busy hour for a twenty-one (21) day study period. The Parties agree that twenty-one (21) days is the study period duration objective. However, a study period on occasion may be less than twenty-one (21) days but at minimum must be at least three (3) business days to be utilized for engineering purposes, although with less statistical confidence.

3.11.2 Exchange of traffic data enables each Party to make accurate and independent assessments of trunk group service levels and requirements. Parties agree to establish a timeline for implementing an exchange of traffic data. Implementation shall be within three (3) months of the date, or such date as agreed upon, that the trunk groups begin passing live traffic. The traffic data to be exchanged will be the Originating Attempt Peg Count, Usage (measured in Hundred Call Seconds), Overflow Peg Count, and Maintenance Usage (measured in Hundred Call Seconds) on a seven (7) day per week, twenty-four (24) hour per day, fifty-two (52) weeks per year basis. These reports shall be made available on a semi-annual basis upon request. Exchange of data on one-way groups is optional.

3.12 Network Management

3.12.1 Restrictive Controls. Either Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps set at appropriate levels on traffic toward each other's network, when required, to protect the public switched network from congestion due to facility failures, switch congestion, or failure or focused overload. CLEC and ILEC will immediately notify each other of any protective control action planned or executed.

3.12.2 Expansive Controls. Where the capability exists, originating or terminating traffic reroutes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk

servicing. Expansive controls will only be used when mutually agreed to by the Parties.

- 3.12.3 Temporary Mass Calling. CLEC and ILEC shall cooperate and share pre-planning information regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes.

4. Intercarrier Compensation.

4.1 Applicability of the FCC USF-Intercarrier Compensation Reform Order

- 4.1.1 Local Traffic, EAS Traffic, and ISP-Bound Traffic. The Parties agree to terminate each other's Local Traffic, EAS Traffic, and ISP-Bound Traffic that physically originates and terminates in the same local calling area on a Bill and Keep basis. Each Party will be entitled to retain all revenues it generates from its End-User Customers for the exchange of such traffic, and neither Party will be required to compensate the other Party for the exchange of such traffic.
- 4.1.2 Termination of IntraLATA Toll Traffic. Each Party will compensate the other Party for termination of IntraLATA Toll Traffic in accordance with the FCC USF-Intercarrier Compensation Reform Order. The rate charged by one Party to the other Party for the termination of IntraLATA Toll Traffic shall not exceed the rate charged by the other Party.
- 4.1.3 Termination of InterLATA Traffic. The Parties will exchange InterLATA Traffic either by routing such to an IXC or by using standard Feature Group D trunking. In the latter event, the Parties will compensate the other for InterLATA Traffic exchanged directly between them in accordance with the FCC USF-Intercarrier Compensation Reform Order. The rate charged by one Party to the other Party for the termination of InterLATA Traffic shall not exceed the rate charged by the other Party.

4.2 Transmission and Routing of Telephone Exchange Service Traffic Relevant to Compensation

- 4.2.1 Interconnected VoIP Service Traffic originated by an End-User Customer of one Party in an exchange on that Party's network and terminated to an End-User Customer of the other Party on that other Party's network located within the same exchange or other non-optional extended local calling area associated with the originating End-User Customer's exchange, as defined by ILEC's applicable local exchange Tariff, shall be included in Local Traffic. Interconnected VoIP Service Traffic directed to a terminating End-User Customer physically located outside the originating End-User Customer's Local Calling Area will be considered Toll Traffic.

- 4.2.2 For purposes of compensation between the Parties and the ability of the Parties to appropriately apply their toll rates to traffic originated or terminated by their End-User Customers, CLEC shall adopt the Rate Center areas and Rating Points that the Commission has approved for the ILECs. In addition, CLEC shall assign whole NPA/NXX codes to each Rate Center, subject to State regulatory requirements. If CLEC only obtains thousands blocks instead of whole NPA/NXX codes, those thousands blocks shall remain rated to the Rate Center associated with the donating NPA/NXX code.
- 4.2.3 The Party's agree there will be no VNXX traffic established under this Agreement
- 4.2.4 As set forth in Section 3.4.4 of this Attachment, Interconnected VoIP Service Traffic shall be assigned to the corresponding jurisdiction for compensation purposes, if all the signaling parameters are included with the traffic exchange. Calling Party Number ("*CPN*") and Jurisdictional Indicator Parameter ("*JIP*") of the originating Interconnected VoIP Service Traffic shall indicate the geographical location of the actual IP caller location, not the location where the call enters the PSTN.
- 4.2.5 Except as provided otherwise in this Agreement, the Parties understand and agree that either Party, upon ten (10) days' notice to the other Party, shall correct the routing of any traffic that is routed in a manner inconsistent with the terms of this Agreement by the other Party over any trunk groups and/or which is routed outside of the mutual agreement of the Parties.
- 4.2.6 Neither Party shall be obligated to compensate the other Party or any third party for Telecommunications Traffic that is inappropriately routed.

4.3 Responsibilities of the Parties

- 4.3.1 Each Party to this Agreement will be responsible for the accuracy and quality of its data as submitted to the respective Parties involved. It is the responsibility of each Party to originate and transmit complete and unaltered calling party number (CPN), as received by an originating party. Each Party is individually responsible to provide facilities within its network for routing, transporting, measuring, and billing traffic from the other Party's network and for delivering such traffic to the other Party's network as referenced in Telcordia Technologies BOC Notes on LEC Networks and to terminate the traffic it receives in that standard format to the proper address on its network. The Parties are each solely responsible for participation in and compliance with national network plans, including the Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP).

- 4.3.2 Each Party is responsible to input required data into Routing Data Base Systems (RDBS) and into Telcordia Technologies Rating Administrative Data Systems (example: BRADS) or other appropriate system(s) necessary to update the Local Exchange Routing Guide.
- 4.3.3 Neither Party shall use any Interconnection, function, facility, product, network element, or service provided under this Agreement or any other service related thereto or used in combination therewith in any manner that interferes with or impairs service over any facilities of either Party, its affiliated companies or other connecting Telecommunications Carriers, prevents any carrier from using its Telecommunication Service, impairs the quality or privacy of Telecommunications Service to other carriers or to either Party's End-User Customers, causes hazards to either Party's personnel or the public, damage to either Party's or any connecting carrier's facilities or equipment, including any malfunction of ordering or billing systems or equipment. Upon such occurrence, either Party may discontinue or refuse service for so long as the other Party is violating this provision. Upon any such violation, either Party shall provide the other Party written notice of the violation at the earliest practicable time.
- 4.3.4 Each Party is solely responsible for the services it provides to its End-User Customers and to other Telecommunications Carriers.
- 4.3.5 Where SS7 connections exist, each Party will provide the other with the proper signaling information (e.g., originating Calling Party Number, JIP and destination called party number, etc.), to enable each Party to issue bills in a complete and timely fashion. All CCS signaling parameters will be provided including CPN, JIP, Originating Line Information Parameter (OLIP) on calls to 8XX telephone numbers, calling party category, Charge Number, etc. All privacy indicators will be honored.

5. Applicability of Other Rates, Terms and Conditions.

- 5.1 Every Interconnection and service provided hereunder, whether direct or indirect, shall be subject to all rates, terms and conditions contained in this Attachment and this Agreement, which are legitimately related to such Interconnection or service.

LOCAL NUMBER PORTABILITY ATTACHMENT
to
INTERCONNECTION AGREEMENT

1. Definitions

For purposes of this Attachment governing number portability, the following definitions shall apply:

- 1.1 "Donor Party" – The Donor Party is the Party that is receiving the number port request and is relinquishing the ported number.
- 1.2 "Local Routing Number (LRN)"- A Local Routing Number is a ten (10)-digit number that is assigned to the network switching elements for the routing of calls in the network.
- 1.3 "Permanent Number Portability" (PNP) is the in-place long-term method of providing Number Portability (NP) using the LRN method.
- 1.4 "Recipient Party" – The Recipient Party is the Party that is initiating the number port request and is receiving the ported number.
- 1.5 "Ten-Digit Unconditional Trigger Method (TDT)" – TDT is an industry-defined PNP solution that utilizes the ten-digit Local Routing Number to provide for an automated process that permits the work at the Recipient Party's switch to be done autonomously from the work at the Donor Party's switch resulting in less downtime to the end-user.

2. Number Portability.

- 2.1 Each Party will provide Number Portability ("**NP**") in accordance with the Act, and applicable FCC rules, regulations and orders.
- 2.2 A Party requesting a number to be ported must send the other providing Party a Local Service Request (LSR). If CLEC requests that ILEC port a number, the Parties shall follow the applicable FCC rules, regulations and orders. ILEC shall not assess any charges on CLEC for number porting including, but not limited to, service order charges or Tariffed charges associated with such requests. The Parties will provide porting in a non-discriminatory manner in compliance with the FCC's rules and regulations and the guidelines of the FCC's North American Numbering Council's (NANC) Local Number Portability Administration (LNPA) Working Group and the Industry Numbering Committee (INC) of the Alliance for Telecommunications Industry Solutions (ATIS). In connection with the provision of LNP, the Parties agree to support and comply with all relevant requirements or guidelines that are adopted by the FCC, or that are agreed to by the telecommunications industry as a national industry standard.

- 2.2.1 The LSR will have a requested due date that is not less than the interval(s) established by the FCC.
- 2.2.2 Both Parties agree to provide a Firm Order Confirmation (FOC) to the Recipient Party within 24 hours from the time an LSR is received.
- 2.2.3 For purposes of this Attachment, the Donor Party may request to use a project management approach for the implementation of LSRs for large quantities of numbers ported from a single End-User Customer location, within a given state. For purposes of this provision, "large quantities" shall mean seventy-five (75) or more numbers. The Donor Party also may request to use a project management approach for the implementation of LSRs for complex ports, which shall be defined as those ports that include complex switch translations (e.g., Centrex, ISDN, AIN services, remote call forwarding, or multiple services on the loop). Under such managed projects ("projects"), the Parties may negotiate implementation details including, but not limited to: due dates, cutover intervals and times, coordination of technical resources, and completion notice.
- 2.3 Notwithstanding any other provision of this Agreement, the Pricing Appendices, any attachment or appendix incorporated herein, or any Tariff, the Parties shall not assess charges on one another for porting telephone numbers, or for processing orders associated with requests for porting numbers. Neither Party will bill the other Party any service order charge for a LSR, regardless of whether that LSR is later supplemented, clarified or cancelled. Notwithstanding the foregoing, neither Party will bill an additional service order charge for supplements to any LSR submitted to clarify, change or cancel a previously submitted LSR.
- 2.4 The Parties agree that an End-User Customer may geographically relocate at the same time as it ports its telephone number to the Recipient Party; provided, however, that the Donor Party may require that the End-User Customer's relocation at the time of the port to the Recipient Party be limited to the geographic area represented by the NXX of the ported telephone number. The Donor Party may not impose a relocation limitation on the Recipient Party that is more restrictive than that which the Donor Party would impose upon its own subscribers with telephone numbers having the same NXX as the telephone number(s) being ported. In addition, the Donor Party may not impose any restrictions on relocation within the same Rate Center by a ported End-User Customer while that End-User Customer is served by the Recipient Party.
- 2.5 Regardless of the number of Location Routing Numbers (LRNs) used by a CLEC in a LATA, ILEC will route traffic destined for CLEC's End-User Customers via direct trunking where direct trunking has been established. In the event that direct trunking has not been established, such traffic shall be routed via a Tandem Switch.

- 2.6 When ILEC receives an unqueried call from CLEC to a telephone number that has been ported to another local services provider, the unqueried call routing rate set forth in the Pricing Attachment, will apply.
- 2.7 Neither Party shall be required to provide Number Portability under this Agreement for excluded numbers defined by FCC orders or other Applicable Law, as updated from time to time, including but not limited to: 500 NPAs; 900 NPAs; 950 and 976 NXX number services; and OCS NXXs (*i.e.*, numbers used internally by either Party for its own business purposes). The term "Official Communications Service (OCS)" means the internal telephone numbers used by ILEC or CLEC.
- 2.8 The Recipient Party will be responsible for the End-User Customer's other telecommunications-related items, e.g., E911, Directory Listings, Operator Services, Line Information Database (LIDB), when it ports the End-User Customer's telephone number in its switch.

3. Cut-Over Process for Number Porting Orders.

3.1 TDT Cut-Overs

- 3.1.1 Where technically feasible, both Parties will use PNP-LRN cut-overs, which rely upon the Ten-Digit Unconditional Trigger Method (TDT) for porting numbers. The Donor Party agrees to set the ten-digit unconditional trigger by 5:00 p.m. Eastern Time on the day before the scheduled due date.
- 3.1.2 The Donor Party agrees to remove the ten-digit unconditional trigger on the next Business Day, no earlier than 11:59 a.m., after the scheduled due date for the port and replace with a PNP trigger, unless the Recipient Party requests otherwise by contacting the Donor Party and submitting a supplemental order.

4. Obligations of Both Parties.

- 4.1 Each Party is responsible for creating or concurrence of Subscription Versions in the NPAC for telephone numbers ported into or out of its network.
- 4.2 When a ported telephone number becomes vacant, e.g., the telephone number is no longer in service by the original End-User Customer, the ported telephone number will be released back to the carrier who is the code holder or block holder.
- 4.3 Each Party has the right to block default routed calls entering a network in order to protect the public switched network from overload, congestion, or failure propagation.
- 4.4 Both Parties must be certified by the Regional NPAC prior to the scheduling of inter-company testing.